Potential Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
•	Status/Concern	Proposed improvement	Advantages	Disadvantages	No.
ARTICLE 1. GENERAL PR	OVISIONS				5
1. Bluff Definition §25-8-1 (1)	Term used to define itself.	Reword.	Clarity.	None.	5
2. Canyon Rimrock Definition §25-8-1 (2)	Term used to define itself.	Reword.	Clarity.	None.	5
3. Cluster Housing Definition §25-8-1 (4)	The original clarifying definition of cluster housing was inadvertently deleted from the Code, leaving use of this provision unclear.	Add original definition from Ordinance 851219-GG back into Code.	Clarify requirements to use cluster housing provisions for WS Rural watershed development; current code & criteria do not provide guidance.	None.	5
4. Crest of a Bluff Definition §25-8-1 (4) [Deleted]	No longer needed since term was deleted in 25-8-92 (A)(2).	Deleted definition of term no longer found in 25-8.	Clarity.		5
5. Critical Environmental Feature Definition §25-8-1 (5)	Faults, fractures, and seeps are all regulated Critical Environmental Features (CEFs) but are not listed in the CEF Definition.	Add faults, fractures and seeps to definition.	Clarifies features subject to the requirements for CEF buffers in §25-8-281.	None.	5
6. Director Definition §25-8-1 (6)	The departmental director responsible for the enforcement of this chapter is not necessarily clear.	Add definition to clarify the director is that of the Planning & Development Review Department unless otherwise indicated.	Clarity.	None.	5
7. Erosion Hazard Zone Definition §25-8-1 (7)	Erosion Hazard Zones are a key technical consideration for engineering designs; the term and concept are not defined in the code.	Add definition. Methods to comply will be developed and published in the Drainage Criteria Manual (DCM) at the same time as the ordinance is adopted.	Clarity.	None.	5
8. Faults & Fractures Definition §25-8-1 (8)	Structure of definition (starting with "is limited to") was confusing.	Reword.	Clarity.	None.	5
9. Impervious Cover Definition §25-8-1 (9)	Definition needs adjustment to focus on infiltration of water into the ground; existing placement of definition is out of alphabetical order.	order.	Clarity.	None.	5
10. Multi-Use Trail Definition §25-8-1 (10)	Term used in revisions (25-8-63 & 261) so needed definition. Current code allows "hiking, jogging, or walking trails and outdoor facilities" (25-8-261) but does not allow "multi-use trails," potentially making creation of hike-and-bike trails more difficult.	Add definition.		surfaces & public use. Develop trail design criteria to address water quality & riparian concerns; place out of Erosion Hazard Zone.	6

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Potential Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
Potential Option	Status/Concern	Proposed improvement	Advantages	Disadvantages	No.
11. Open Space Definition §25-8-1 (11)	The term "open space" is used (e.g., 25-8-261) and needs to be defined to make its meaning clear.	Add definition to clarify what kind of uses are allowed within the critical water quality zone. Add multi-use trails. Limit golf courses to areas left in a natural state.	Clarity. Multi-use trails central to connectivity goals of Imagine Austin. Managed golf courses not appropriate near waterways; could seek variances & show protective measures provided.	Increased permitting costs & uncertainty for proposed golf course development in CWQZ. See trail discussion above.	6
12. Descriptions of Regulated Areas §25-8-2	Division of resonsibilities between WPD & PDRD needs updating. Some watersheds need to have their names updated and/or be assigned to correct watershed classifications.		Clarity.	None.	6-7
13. Urban Watershed Exceptions §25-8-23	Exceptions granted in 1991 Urban Watershed Ordinance are no longer relevant.	applicable or relevant including RR-zoned exceptions.	Simplifies code by deleting outdated sections.	None.	8
14. [Citywide] Redevelopment Exception §25-8-26	Minor adjustments to make consistent with langauge in 25-8-27.	Clarify that a site to be redeveloped must have been properly permitted. Base vehicle trip limitations on most recent authorized use.	Clarity.	None.	8-9
15. Barton Springs Zone (BSZ) Redevelopment Exception §25-8-27	Minor adjustments needed for clarity and to reflect proposed code changes	Clarify existing development must have been authorized; i.e., illegally constructed development cannot take advantage of this section; eliminate reference to existing section 25-8-482 (proposed for deletion since function consolidated in 25-8-261); clarify option to use combination of SOS and sedimentation-filtration ponds to be outlined in Environmental Criteria Manual.	Clarity.	None.	9-11
16. Land Use Commission Variances §25-8-41	Need to update section numbers to reflect changes; clarify that applicant has the burden of proof; added Barton Creek Water Quality Transition Zone; moved wastewater language from 25-8-361 (A).	Clarifies burden of applicant; consolidates land use commission variance from 25-8-361.	Clarity and consolidation.	None.	11
17. Administrative Variances §25-8-42	Current code distributes administrative variances throughout the Chapter. Need to clarify burden to establish findings. Need to add new material.	Consolidate all administrative variance references in the Administrative Variance section for clarity. All the same as current code except (B)(1) & (5), discussed below. Add provisions for interbasin transfers: (B)(9) & (D)(6).	Clarity.	None.	12-13

Potential Op	ntion	Description of Current	Proposed Improvement	Anticipated Impacts		
Potential Of	ption	Status/Concern	Proposed improvement	Advantages	Disadvantages	No.
Quality (CWQ			Remove eligibility for administrative variance for CWQZ variance requests unless a project is required to protect the environment or protect public health and safety.	streambank stabilization, flood	Will need to define "protect the environment" to ensure it is not broadly applied to improvements required for development.	12-13
Draina	nces: rural Control	Currently can get an admin. variance for cut & fill for stormwater ponds but not associated drainageways.	Change to "for a water quality control or detention facility and appurtenances for conveyance such as swales, drainage ditches, and diversion berms"	Drainage works associated with admin. variances for pond cut & fill should be considered together.	None.	13
	nces: ons moved other places in ode	(B) (2) = current 262 (C); (B)(3)= current 281 (D); (D) (3) = current 281 (D); (D) 5= current 343 (B)	Moving/consolidating administrative variances into one section.	Consolidation.	None.	12-13
(IC) Ca Porous §25-8-	vious Cover falculations: s Pavement -63 [Deleted] ; (C)(8) & (9)	Credit for porous pavement unclear and may be given a new value; porous pavement fire lanes not given credit.	Clarify that porous pavement for pedestrian walkways does not count as impervious if designed in accordance with the ECM & not located over the recharge zone. Remove confusing 20% credit & replace in ECM with ability to use porous pavement as a water quality control for non-pedestrian pavement.		Potential massing implications due to alignment of zoning and watershed impervious cover definitions. Limited to pedestrian walkways so that larger-scale applications such as plazas and sport courts would not be exempt. Elimination of 20% credit may not be offset by advantages of using as water quality control.	14-15
	lculations: Surfaces -63 (C)(2)	Need to clarify that hard-surfaced trails (e.g., concrete, asphalt) are excluded in impervious cover in site calculations.	Specifically add publicly accessible, hard-surfaced multi-use trails to list of items excluded from impervious cover calcs. Note: need to develop new design criteria to address potential environmental impacts.	granite) and proper design can mitigate potential environmental impacts.	Potential damage to riparian zones with increased impervious surfaces. Should be able to mitigate with proper design & setbacks from waterways; some especially sensitive areas should be off-limits.	14
Detent	lculations: Quality & tion Controls -63 (C)(3) &	Current code exempts water quality & flood controls from IC calculations; but subsurface controls installed beneath impervious cover should not receive an exemption.	Clarify that subsurface water quality & flood controls covered with impervious surfaces count as IC.	Clarify.	None.	15

Potential Option	Description of Current	Drangood Improvement	Anticipate	ed Impacts	Page
Potential Option	Status/Concern	Proposed Improvement	Advantages	Disadvantages	No.
24. IC Calculations: Gravel §25-8-63 (C)(7)	Current code does not distinguish between pervious gravel areas and those underlain with compacted base, which are functionally impervious.	Clarify that gravel areas to be counted as pervious must not be constructed with compacted base.	Encourage green infrastructure design elements; discourage use of hard linings that prevent infiltration of water and impair recharge & creek baseflow.	None.	15
25. IC Calculations: Fire Lanes §25-8-63 (C)(9)	code & Environmental Criteria Manual	cover totals; require crash barriers to	Increased design & spatial flexibility; low risk to water quality or for clogging due to low use/pollutant loads on surface (similar to pedestrian surfaces).	Less pervious, vegetated cover on site.	15
26. IC Calculations: Vegetated Parking Garages §25-8-63 (C)(10)	§25-1-23 (Impervious Cover Measurement) includes a provision to place soil & vegetation on subsurface parking garages and not count them as impervious cover. This provision is not consolidated in 25-8.	Move code provisions from §25-1-23 to §25-8-63 for clarity and ensure compatability.	Conservative requirement to provide 4 feet of soil above garage ensures continued pervious function, despite structure below. Encourages placement of parking below grade.	Stringent soil-depth provision will likely be barrier to frequent use.	15
27. IC Calculations: Commercial Design Standards §25-8-63 (D)	25-2 Subchapter E allows internal porous pavement walkways to be exempted from impervious cover calculations; this is no longer needed since all such porous walkways are proposed as such under 25-8-63 (C)(8).	Remove redundant Commercial Design Standard credit. (Also change in 25-2.)	Clarity.	None.	15
28. Roadways [Boundary Street Deduction] §25-8-65	Current code requires a deduction of a site's internal impervious cover to account for adjacent roadway IC; but causes significant reductions in buildable area for some sites.	Eliminate boundary street deduction requirements.	Retains more buildable area on sites adjacent to roadways (logical location for higher IC); all such areas are required to meet own IC limits & provide on-site water quality controls. Reduces complexity.	Water Protection Zone. Will need	16

Potential Option	Description of Current	Branged Improvement	Anticipate	ed Impacts	Page
Potential Option	Status/Concern	Proposed Improvement	Advantages	Disadvantages	No.
ARTICLE 2. WATERWA	YS CLASSIFIED; ZONES ESTABLISHED	-		-	16
29. Waterway Classifications [Headwater Creek Buffers] §25-8-91	Buffers only extend to waterways with greater than 320 and 128 acres of drainage in some watersheds. Results in up to a 50% reduction in the stream mileage protected compared to protections for Austin's best protected creeks. Five different systems exist across the City, adding to complexity & confusion.	Standardize drainage area thresholds for all waterway classifications citywide: * Minor = 64-320 acres; * Intermediate = 320-640 acres; * Major = 640+ acres. Is system currently used in Water Supply Rural & majority of Barton Springs Zone.	Simplifies a complex system to use one strategy across entire jurisdiction. 64-acre threshold coincides with floodplain delineation & stream buffers elsewhere in City jurisdiction. Addresses Erosion Hazard Zone: esp. critical in prairie/clay creeks; is public safety issue; prevents costly infrastructure repair; prevents wastewater line construction directly in channel (key strategy for Bacteria TMDL); buffers on small streams (e.g., 64-acre drainage areas) correlated with stream health; doubles stream mileage protected; keeps streams out of pipes/straightened channels.	64-acre buffers provide constraint in highly urbanized areas (e.g., commercial & mixed use centers): may warrant mitigation system (see below) for limited areas of higher intensity development (e.g., Imagine Austin Comprehensive Plan sanctioned activity centers & corridors). Critical Water Quality Zone is barrier to road crossings, connectivity & water quality control placement (see methods to address below).	16-17
30. Critical Water Quality Zones (CWQZs) Established [Creek Buffer Widths] §25-8-92	Current Critical Water Quality Zone buffers vary in width using the 100-year floodplain; in the urban and suburban watersheds the system does not always provide sufficient Erosion Hazard Zone protection.	In urban and suburban watersheds, provide width of 100, 200 & 300 feet respectively for "minor," intermediate," & "major" waterways respectively to protect the Erosion Hazard Zone and provide a uniform system. Retain current widths in the Drinking Water Protection Zone, since these are adequate for erosion hazard & water quality protection.	Same as above: better stream and property protection.	Wider width reduces developable footprint. (But likely to be in the Erosion Hazard Zone hence not appropriate for development.) More restrictive than current buffers in Urban Watersheds: need to evaluate Urban impacts.	17-19
31. CWQZs Establishe Exceptions for Public Roads §25-8-92 (A)(2) & (B)(5)	d: Current practice does not apply stream buffers to waterways considered permanently altered (e.g., highway drainageways); but is not clear Code directive.	Exempt roadside drainageways that cannot be restored to natural conditions from Critical Water Quality Zone requirements.	stream buffer application; codifies existing City policy; needs objective guidance on making determination	Some (esp. large) waterways may be in good condition or have good potential for restoration, compromising present or future ecological function; system should protect.	17-18
32. CWQZs Establishe Crest of Bluff §25-8-92 (A)(2) [Deleted]	d: Current code exempt a "crest of a bluff" from Critical Water Quality Zone protections, exposing development in such a location to erosion hazards.	Delete the exception for crests of bluffs. Exemptions possible using variance process.	Provide erosion hazard protection to development on bluffs. Relatively few sites meet the full definition of bluff. Variance process available if reduced CWQZ warranted.	None.	17

Potential Option		Description of Current	Proposed Improvement	Anticipated Impacts		Page
Poter	·	Status/Concern	•	Advantages	Disadvantages	No.
33.	CWQZs Established: Buffer Averaging §25-8-92 (B)(4)	Proposed new buffer system could be difficult to implement in some cases due to site-specific constraints.	Add buffer averaging option for urban and suburban watersheds to adjust width and add length to achieve same overall footprint of buffer.	Adds flexibility to buffer design to work around site-specific geographic & cultural features.	Must ensure key existing features (e.g., woodlands) are not eliminated while less valuable areas are extended protection.	18
34.	Water Quality Transition Zone (WQTZ) §25-8-93	Water Quality Transition Zones (WQTZs) constitute a second & less protective buffer beyond CWQZs in Suburban Watersheds: e.g., 30% IC is allowed. They are not as useful as the CWQZ buffers & their requirement adds complexity and limits flexibility for development.	Eliminate the Water Quality Transition Zone in Suburban Watersheds in exchange for other new requirements above (e.g., extend CWQZ to headwaters, etc.). Retain in the Drinking Water Protection Zone.	Provision of a more extensive CWQZ on smaller creeks is more valuable for water quality & erosion management than retaining the WQTZ on larger creeks.	Enables higher density on site nearer to creek in areas that currently require a WQTZ (note: would be considered an advantage from development perspective).	19
ARTI	CLE 3. ENVIRONMEN		SMENT]; POLLUTANT ATTENUATION	PLAN	•	19
	§25-8-121	Unrelated, federal Phase I Environmental Assessment requirements share the same name as existing City requirement, creating confusion.	Change the name to "Environmental Resource Inventory."	Clarity.	None.	19-20
	Environmental Resource Inventory §25-8-121 (B)(3)	Requirements to justify storm drains problematic in urbanized settings where they may be necessary and avoid environmental damage.	Eliminate the storm drain justification requirement; add an ECM cross-reference. Better approaches exist to encourage green infrastructure than this requirement (which has had little practical impact).	Eliminate code conflicts; support Imagine Austin's "compact & connected" mandate.	None. But need to clarify that the original intent will be retained in other code & criteria provisions.	20
ARTI	CLE 4. MANAGEMEN	IT PRACTICES; ENGINEER'S CERTIFIC				21
37.	Innovative Management Practices §25-8-151	Section is currently used for dual purposes of reviewing innovative water quality controls and management practices for critical environmental features (CEFs). However, the current wording of this section does not treat these two purposes as separate.	Distinguish between innovative water quality controls and innovative management practices for CEFs. New section (A) speaks to water quality controls; existing section (now B) speaks to CEFs.	Clarity.	None.	21
		Statement that "the City encourages innovative management practices" is well intentioned but is not an enforceable code provision.	Delete subjective language. The Land Development Code, as currently written, does not include statements of purpose.	Consistency.	Risks sending message that the City is not interested in innovation. Address in program implementation.	21
		D SEDIMENTATION CONTROL; OVERI		T	T	21
	Overland Flow §25-8-185	Storm drain references problematic in urbanized settings where they may be necessary and avoid environmental damage. References to maintenance of overland flow does not apply to many sites.	Add the words "and restore" to acknowledge many sites need repair, not just preservation. Remove language prohibiting construction of enclosed storm drains [similar to §25-8-121 (B)(3)]. Other minor rewording.	Eliminate conflict with 25-7 Drainage chapter; low-impact drainage to be incentivized in other code & criteria sections.	None. But will need to clarify that the original intent will be retained in other code & criteria provisions.	23

Potential Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
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40. Fiscal Security for	Fiscal security requirements for erosion	Move language from 25-7 into the	Clarity.	None. Text moved unchanged.	23
Erosion and	and sedimentation controls are	Erosion and Sedimentation article of 25-			1
Sedimentation	currently located in 25-7-65 (drainage	8.			1
Controls	chapter) but better belong in the 25-8				1
§25-8-186	Environment chapter.				1
ARTICLE 6. WATER QUA	LITY CONTROLS				23
Additional changes to thi	s article may be presented in near futu	re. See WPO Website for updates:	http://www.austintexas.ge	ov/page/watershed-protection-ordina	ance-0
41. Structural Water	Outside of the BSZ and Urban	Require WQ controls for projects with	Prevents large areas of	Minor increase in private cost to	24
Quality Controls	Watersheds, current code does not	over 8,000 square feet of IC per		build certain projects.	1
§25-8-211	require permanent water quality	existing Environmental Criteria Manual	creating problems; reduces public		1
	controls ("ponds") on sites with less	requirement model for Urban	costs to repair downstream		1
	than 20% impervious cover (IC), no		erosion & water quality problems		1
	matter how much total IC is proposed.	is for 5,000 ft2 IC: propose 8,000 ft2 to	created without controls; controls		1
	Projects with hydraulically connected	match SOS §25-8-516 small-project	on low IC sites typically low cost.		1
	impervious cover can have significant	exception.)	,, ,		1
	water quality impacts.				1
42. Structural Water	Currently not clear that water quality	Clarify that the requirements do not	Clarity.	None.	24
Quality Controls	control requirements do not apply to	require water quality controls on a	[
§25-8-211	individual single-family or duplex lots,	single-family or duplex lot but apply to			1
3=0 0 = 1 1	but rather to the residential subdivision	the residential subdivision as a whole.			1
	as a whole.				
43. Water Quality	Commercial ponds are being	Add requirement that ponds must be	Ensures that ponds continue to	Limitation on design flexibility.	24
Control Standards:	constructed that are not reasonably	accessible for maintenance and	function properly over time.	,	1
Pond Accessibility	accessible either for City inspection or	inspection. (Must design for needed	Removes burden of problematic		
§25-8-213(A)(3)	for private maintenance.	equipment & personnel to reach pond,	access from future property		
3=0 0 = 10(1,1/(0)	ioi pirrato mamonanos.	perform repairs, etc.)	owners/managers.		
44. Structural Water	Current code requires the "isolation" of	Delete the term "isolate" from this	Allow the "stacking" of water	Isolation of water quality volume	24
Quality Controls:	the water quality volume, making it	section; where appropriate, require		originally done to avoid "re-	
Water Quality	difficult to combine flood and water	isolation of the water quality volume in	reduce cost & increase space	suspension" of captured pollutants	1
Volume Isolation	quality volumes for space efficiency	the Environmental Criteria Manual, but	efficiency; increase WQ function	and to prevent damage to the WQ	1
§25-8-213(B)	and reduced cost.	on a control-by-control basis.		pond; but both concerns can be	1
320 0 270(2)	and roadou door.	on a control by control bacie.	complexity of designs.	addressed using design criteria.	1
			demplexity of designs.	dadressed using design official.	1
45. Structural Water	Existing code for Water Supply Rural	Add provision to cap disturbance of the	Reduce modifications &	None. Should be sufficient space	25
Quality Controls:	development rely on the 40% buffer	40% buffer at 50% or less. (50%	construction-phase damage in	remaining to locate controls.	`
Water Supply Rural	zone for water quality control; with the	threshold taken from the Hill Country	40% buffer.		1 '
§25-8-213(C)(3)	new 8,000 square foot impervious	Roadway Ordinance.)	10,000.1011		1 '
3200210(0)	threshold, this will no longer be	Tradital Standardon,			1
	necessary and the 40% buffer should				1 '
	be better protected to avoid damage.				1 '
	po polici prolecieu lo avolu damage.				

Potential Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
Potential Option	Status/Concern	•	Advantages	Disadvantages	No.
46. Payment-in-Lieu of Water Quality Controls in Urban Watersheds §25-8-214(C)	Current code does not refer to the Environmental Criteria Manual, which contains key information on the administration of this provision. The current requirement that the director accept or deny requests within 15 days is not practical due to the complexity of these requests.	Add a reference to the Environmental Criteria Manual. Delete the requirement to process within 15 days.	Clarity (reference to ECM). Pragamatism (processing time).	None.	25
47. WQ Control Maintenance & Inspection: Subsurface Controls §25-8-231(E&F)	Construction of subsurface water quality (WQ) & flood controls is not currently limited & results in facilities	Require maintenance plan and 3rd party inspections with annual reporting for all subsurface water quality controls.	Control the quality of designs and ensure proper inspection & maintenance of subsurface controls.	Expense to property owners (though otherwise no maintenance assured); administrative cost to City.	26
ARTICLE 7. REQUIREME	NTS IN ALL WATERSHEDS			•	28
48. Critical Water Quality Zone (CWQZ) Development Prohibited §25-8-261	Current code prohibits development in the CWQZ (with noted exceptions) in locations scattered throughout Chapter 25-8: 25-8-391 (Suburban Watersheds); 25-8-422 (Water Supply Suburban); 25-8-452 (Water Supply Rural); and 25-8-482 (Barton Springs Zone).	Consolidate references to a single location in the CWQZ section.	Clarity.	None. No change in substance.	28
49. CWQZ Development: Open Space §25-8-261(B) 50. CWQZ	Current code defines uses permitted in the CWQZ (parks, golf courses, open spaces, etc.). Meaning of open space is not clear. Current Water Supply Rural (WSR)	discussion above in 25-8-1(11). Adjust text to speak to open space and	Clarity. Underscores open space as central land use in CWQZ & ability to locate trails in these areas. Consistency.	None. Potential trail impacts to be addressed in trails criteria & requirements to place trails in outer half of CWQZ. None. See above.	28
Development: WSR Open Space §25-8-261(B)(1)	section limits uses in CWQZ; does not match new open space or trail language.	multi-use trails.			
51. CWQZ Development: Master Planned Parks §25-8-261(B)(2)	Current code allows master-planned parks (reviewed by Land Use Commission, approved by Council) in the Barton Springs Zone to include recreational development in the CWQZ; not an option for Water Supply Rural parks.	Expand option for use in Water Supply Rural parks.	Grants same exception that already exists in the Barton Springs Zone; squares with the fact that the Code is more restrictive for park uses within the BSZ and water supply rural watersheds.	None. Note: is rarely utilized provision.	28

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Pote	ntial Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
rote	illiai Option	Status/Concern	·	Advantages	Disadvantages	No.
52.	Agriculture &	Not clear in current code whether urban agriculture (e.g., small, low-impact farms) or community gardens are allowed in the CWQZ.	Add new allowance for community gardens and sustainable urban agriculture in the upper half of the CWQZ. Must design in accordance with (new) criteria in the Environmental Criteria Manual. Structures not allowed (obstruct flows, intrude in area intended for natural land cover).	Watershed Protection Master Plan. Develop design criteria to address water quality & riparian concerns.	Potential damage to riparian zones with increased nutrient application & suppression of native riparian vegetation. Mitigate with proper design & setbacks from waterways; some especially sensitive areas should be off-limits.	28
53.	CWQZ Development: Barton Springs Zone Exceptions §25-8-261(C)	Zone CWQZ.	Delete this exception. Also delete language about pedestrian & bicycle bridges. Clarification: the area downstream of the Barton Springs pool is designated as "Water Supply Suburban," not Barton Springs Zone.	piers, etc. not appropriate in BSZ. Bicycle/ pedestrian text redundant since these crossings now clarifid	If boat ramp docks, piers, etc. sought, will have to handle using master planned park provision or via variance. But is appropriate scrutiny for intrusive uses.	28-29
	Line Crossings §25-8-261(D)	does not address future channel	Specify "the most direct path" must be used to minimize disturbance. Require erosion hazard zone assessments for utility crossings (depth component).	already designed to cross using direct path.	Additional design & construction cost to increase line depth (note: must be counterbalanced by cost to repair if not properly designed).	29
55.	CWQZ Development: Utility Line Location §25-8-261(E)	Current code allows utility lines (e.g., wastewater lines) to cross CWQZs, but does not lines to run parallel to the waterway in the CWQZ.	For urban and suburban watersheds, allow utility lines in the upper half of the CWQZ outside of the erosion hazard zone & outside of Critical Environmental Feature buffers; also must avoid protected trees (address in Environmental Criteria Manual).	impact of deep wastewater trenching. Area nearest creeks still off-limits.	More disruption near creeks than if excluded from CWQZ entirely. Potential damage mitigated by erosion hazard, Critical Environmental Feature, and tree provisions.	29
	CWQZ Development: Detention Basins & WQ Controls §25-8-261(F)	Current code permits on-line detention basins to be built in CWQZs; but practice impairs waterway function & should be avoided where possible.	Change "permitted" to "prohibited" for detention & wet ponds in the CWQZ unless certain conditions are met: must meet Floodplain Modification provisions and must be designed per the Drainage & Environmental Criteria Manuals.	controls should be the exception,	Modest reduction in convenience of flood detention as conventionally designed.	29
57.	CWQZ Development: Floodplain Modifications Prohibited §25-8-261(G)		Refer to new Floodplain Modification section 25-8-364 which disallows floodplain modification in the Critical Water Quality Zone in all watershed regulatory areas, except for cases of protecting the environment and public health & safety or where otherwise permitted (e.g., street crossings).	health. Exceptions should only be made to correct environmental	Reduces convenience of flood detention and conveyance as conventionally designed. Note: Need to find other areas to capture flexibility than sensitive riparian areas.	29

Potential Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
Potential Option	Status/Concern	Proposed improvement	Advantages	Disadvantages	No.
58. CWQZ Development: Detention Basins & WQ Controls §25-8-261(H)	Current code does not allow water quality controls to be built in CWQZs; but some water quality controls are complimentary to riparian areas under certain conditions.		Adds flexibility to site design; more effective placement of WQ controls to help with baseflow enhancement; can help restore function and condition of buffer.	Need to make sure buffer not overly encroachedif too close, controls may be damaged by erosion/ flooding and/or will impair the functionality of the buffer.	29
59. CWQZ Development: No Small Single-Family Lots in CWQZ §25-8-261(I)	Current code does not prevent the inclusion of CWQZ areas in residential lots, contributing to alteration & vegetative clearing of riparian areas.	Disallow location of single-family lots less than 5,750 square feet in CWQZ buffers.	Avoid risks to both creeks & property owners; standard practice in recent past has been to exclude CWQZ from SFR lots (i.e., does not represent big change in practice).	Reduced design flexibility.	29
60. CWQZ Street Crossings §25-8-262(B)	Current code is not clear as to whether bicycle and pedestrian trails may cross CWQZs.	Specify that multi-use trails are permitted in CWQZs.	Clarity. Aligns environmental code with City goals to improve connectivity via alternative transportation.	Potential damage to riparian zones with increased impervious surfaces & public use. See Multi-Use Trail discussion above in 25-8-1(10.	30
61. CWQZ Street Crossings §25-8-262(C)	Current code limits the frequency of stream crossings in all but Urban watersheds. This provision will conflict with the Imagine Austin Comprehensive Plan objective to facilitate connectivity and associated social and environmental benefits.	Add an option to allow street crossings within CWQZs within identified centers & corridors; crossing must maintain water quality & quantity of recharge in recharge & contributing areas of the Edwards Aquifer. Does not apply to the Barton Springs Zone.	to facilitate connectivity in	None anticipated: street crossings are expensive and proposed infrequently.	30
62. CWQZ Street Crossings §25-8-262(D)(3)(a)	Current code limits the frequency of minor stream crossings in CWQZs to every 1,000 feet; maximum block length in Subdivision Code 25-4-153 is 900 feet.	Change minimum CWQZ street- crossing spacing requirement to 900 feet for 64-acre minor waterways in the DDZ.	Aligns several code provisions with minimal downside.	None: few to no additional bridge crossings (and potential for associated environmental disruption) anticipated with this change.	30
63. CWQZ Street Crossings §25-8-262(C) [Deleted]	Current code provides an administrative variance to Street Crossings of CWQZs except in the Barton Springs Zone.	Administrative Variance section 25-8-42(B)(2).	Consolidation.	None. No change in substance.	30
64. Critical Environmental Features (CEFs) §25-8-281 (C)(1)(b)(3)	Methods to calculate the geometry of CEFs is stated in the Environmental Criteria Manual but needs to be supported by Code.	Add a code reference to the Environmental Criteria Manual provisions to calculate CEF buffer geometry.	Clarity.	None.	31
65. CEF Protections: Innovative Options §25-8-281(C)(3)(c)	25-8-151 (Innovative Management Practices) includes a provision to enhance recharge; the CEF section needs to reflect this possibility.	Add a cross reference to 25-8-151 to 25-8-281.	Consistency.	None. Supports existing practice.	31

Potential Option	Description of Current	Proposed Improvement	Anticipated Impacts		
Potential Option	Status/Concern	•	Advantages	Disadvantages	No.
66. CEF Protections: Protective Fencing §25-8-281(C)(4)	Current code does not specify CEF buffer areas to be left in natural state & protected with fencing where needed.		Strengthened CEF provisions to protect the features & the public.	Some additional cost to build & maintain fencing; no extra cost (possible savings) for leaving in natural state.	31
67. CEF Protections: Owner Responsible §25-8-281(C)(5)	Need clarification in the Environmental Criteria Manual (ECM) as to how preserve the water quality function of the buffer.	Add language to Code clarifing owner is responsible for CEF buffer maintenance per criteria in the ECM.		None.	31
68. CEF Protections: Void Mitigation §25-8-281(C)(5)	Void mitigation addressed in the ECM but needs to be supported by Code.	Add language to Code matching the ECM requirements.	Codifies current practice.	None.	31
69. CEF Protections: Administrative Variance §25-8-281 Deletion	Current code provides an administrative variance to CEF protections except for locations at or within 500 feet of the shoreline of Lake Austin.	Maintain provision but move to Administrative Variance section 25-8-42(B)(3).	Consolidation.	None. No change in substance.	32
70. Wetlands Protection. Area Clarification §25-8-282	Current code references the "central business area" which is not defined.	Add language denoting the area as bounded by IH-35, Riverside Dr, Barton Springs Rd, Lamar Blvd, & 15th Street, consistent with other references in 25-8 (e.g., 25-8-92(E).	Clarity.	None.	32
71. Construction of a Building or Parking Area §25-8-302(B)(3)	Current code requires hillside restoration with native vegetation; native options can be limited in availability and effectiveness.	Specify that hillside revegetation can use native or adapted plants and that guidance be provided in the Environmental Criteria Manual.	Added flexibility; ECM guidelines intended to prevent use of potentially harmful or invasive plants.	None on balance: risk of problems with non-native plants must be weighed against benefits of adapted plants.	33
72. Spoil Disposal §25-8-343		Maintain provision but move to Administrative Variance section 25-8-42(B)(7).	Consolidation.	None. No change in substance.	35
73. Wastewater (WW) Restrictions: CWQZs §25-8-361(A) [Deleted]	Provision to prohibit wastewater lines in Critical Water Quality Zones (CWQZ) more logically belongs in CWQZ section.	Move provision to CWQZ section 25-8-261(D).	Consolidation & clarity.	None. No change in substance.	36
74. WW Restrictions: On-Site Systems over Edwards Aquifer §25-8-361(A) [Formerly (B)]	Current code reference to on-site sewerage systems in the Edwards recharage area need to refer to the relevant Code section.	Refer to City Code Chapter 15-5 (Private Sewage Facilities).	Consistency.	None.	36
75. WW Restrictions: Water Supply Rural §25-8-361(C) [Deleted]	Reference to 40 percent buffer zone more logically belongs in Water Supply Rural Section.	Move provision to Water Supply Rural section 25-8-453(C)(2).	Consolidation & clarity.	None. No change in substance.	36

Potential Option	Description of Current	Proposed Improvement	Anticipate	ed Impacts	Page
roteittai Option	Status/Concern		Advantages	Disadvantages	No.
76. Wastewater Restrictions §25-8-361(D),(E) & (G) [Deleted]	Current code regulates some aspects of wastewater infrastructure that may conflict with State Law.	Remove or modify code to square with State requirements.	Original code no longer relevant. Remove for clarity.	None.	36
77. Wastewater Restrictions §25-8-361(B)(4) [Formerly (F)]	Construction of wastewater disposal systems too close to existing, established trees can cause damage to the trees and should be avoided.	application within the "half critical zone" of a protected tree.	Provide adequate distance between wastewater infrastructure to protect trees.	Minor reduction in convenience of wastewater application infrastructure.	36
78. Wastewater Restrictions §25-8-361(B)(5) [Formerly (F)]	Construction of wastewater disposal systems too close to Critical Environmental Features (CEFs) can cause damage to the features and should be avoided.	application inside CEF buffers.	Provide adequate distance between wastewater infrastructure and sensitive environmental features, such as karst features & springs.	Minor reduction in convenience of wastewater application infrastructure.	36
79. Floodplain Modifications §25-8-364 [New]	Regulation of floodplain modifications is	Add a section in 25-8 clarifying requirements for modifying floodplains. Disallow floodplain modification in the Critical Water Quality Zone and areas with existing natural and traditional character, except for cases of protecting the environment or public health & safety. Sites proposing modification must restore natural and traditional character and design for both existing and fully-vegetated conditions.	Adequate riparian vegetation is a central pillar of watershed health (together with properly managed hydrology): retention of natural landforms and retention or restoration of vegetation in this area is crucial to creek health.	Reduces development flexibility & complicates provision of flood mitigation as conventionally designed. Note: Need to find other areas to capture flexibility than sensitive riparian areas.	37
80. Interbasin Diversions §25-8-365 [New]	3	Limit transfers to 20% of a site or 1- acre maximum, whichever is less. Allow administrative approval of transfers within the same watershed class. Require a Commission variance to move water from one watershed classification to another (e.g, from the Barton Springs Zone to an Urban Watershed).	Maintain natural drainage patterns with some flexibility within watershed classifications; clarifies & makes consistent the permitting process.	May require additional design & expense for some developments.	37
ARTICLE 8. URBAN WAT	ERSHED REQUIREMENTS	,			28
81. Urban Watersheds Requirements Article 8 [New]	Current code provides a special section	Add "Urban Watershed Requirements" section to spell out that development is prohibited in the CWQZ and clarify impervious cover limits in the Uplands Zone & ETJ.	Clarifies requirements.	None.	38
	WATERSHED REQUIREMENTS				38
82. Critical Water Quality Zone §25-8-392 [Deleted]		e items moved to §25-8-261 Critical Wate (No change in regu		n (see item 48 above).	38

Potential Option		Description of Current Status/Concern	Proposed Improvement	Anticipated Impacts		Page	
				Advantages	Disadvantages		
83.	Water Quality Transition Zone §25-8-393 [Deleted]	Water Quality Transition Zone setbacks proposed to be eliminated for Suburban Watersheds. See discussion in item 34 above: §25-8-93 Water Quality Transition Zone.					
84.	Uplands Zone: Gross Site Area Impervious Cover §25-8-392(A)	Current rules use "Net Site Area" formula which is complex and complicates development on properties with stream buffers.	Use "Gross Site Area" basis for impervious cover calculations.	. ,	For sites where IC increases, will decrease baseflow and increase reliance on structural controls to mitigate stormwater runoff impacts.	38	
85.	Uplands Zone: Impervious Cover (IC) Limits §25-8-392(B)	Not clear that Brushy Creek watershed includes the subwatersheds of South Brushy and Buttercup.	Clarify that Brushy Creek watershed includes the subwatersheds of Buttercup and South Brushy.	Clarification.	None.	38	
86.	Transfer of Development Intensity: Impervious Cover Limits Apply §25-8-393(A)	other areas to the Uplands must still	Add text to clarify that Uplands impervious cover is subject to IC limits. (Note that IC levels are higher with transfers than without.)	Clarity.	None.	39	
87.	Transfers: Critical Water Quality Zone §25-8-393(A)(1)	Text not consistent with other transfer sections. Only option is to dedicate land to City.	Add text to make consistent with other sections. Add option to allow land to be transferred to "another entity" (e.g., County, a land trust).	Clarity. Extend more options for transfers, which confer environmental & community benefits.	None.	39	
88.	Transfers: WQ Transition Zone Deleted §25-8-393(A)(2-4) [Deleted]	Transfer sections for Water Quality Transition Zone buffers are no longer applicable: these buffers eliminated for Suburban Watersheds (see 25-8-93).	Delete these sections.	Consistency.	None.	39-40	
89.	Transfers: CEF Buffer Transfers §25-8-393(A)(5) [Deleted]	Current code allows increased impervious cover in the Uplands if land within Critical Environmental Features (CEF) buffers is left in an undisturbed state; but this is already the expectation.	Delete this section.	Consistency. Expectation is for all CEF buffers to remain in natural condition.	None.	40	
90.	Transfers: Wastewater Disposal §25-8-393(A)(6) [Deleted]	Current code allows increased impervious cover in the Uplands if land within wastewater irrigation areas is left in an undisturbed state; but does not provide public benefit.	Delete this section.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.	40	

Potential Option		Description of Current	Proposed Improvement	Anticipated Impacts		Page
Pole	ппа Орноп	Status/Concern	Proposed improvement	Advantages	Disadvantages	No.
91.	Transfers: Floodplains, Environmentally Sensitive Areas & Land Dedication §25-8-393(2) [New]	Current code offers transfer credits to uplands if Critical Water Quality Zone (CWQZ) buffer areas are dedicated to the City fee simple; no option exists for floodplain or other environmentally sensitive areas outside the CWQZ.	Offer transfers of impervious cover for land dedicated to City in (a) 100-year floodplains or (b) environmentally sensitive upland areas (e.g., remnant prairies, woodlands) determined by environmental resource inventory) that are left in a natural state, accepted by the City or other entity, and not included in IC calculations elsewhere.	Protect key areas otherwise degraded by development pressure; incentivizes their protection and potential public use. Could serve a similar role to the Conservation Subdivision option used by Travis County.	Must ensure maintenance requirements for additional land can be met.	40
92.	Transfer of Development Intensity: Transfer Proximity & Timing §25-8-393(B)		Allow the transfer for development intensity within the same watershed classification; allow transfers on site plans (not just plats).	Encourage more use of transfers of development intensity to realize the benefits to the environment & community.	Some areas could see a much larger impact than others; could address by ensuring that the "receiving areas" are within Comp. Plan-approved centers & corridors. Requires additional administrative burden to track over time.	40-41
ARTI	CLE 10. WATER SUF	PLY SUBURBAN WATERSHED REQU	IREMENTS			41
93.	Critical Water Quality Zone §25-8-422 [Deleted]	Critical Water Quality Zone items moved to §25-8-261 Critical Water Quality Zone Development.			41	
94.	Water Quality Transition Zone (WQTZ) §25-8-422(A)&(C)	Current code prohibits the placement of WQ controls in WQTZs in Water Supply Suburban watersheds, despite the allowance of development in these areas.	Allow minor drainage facilities and water quality controls in the Water Quality Transition Zone over the recharge zone (language aligned with Barton Springs Zone). Allow water quality controls in the Water Quality Transitions Zone outside on the recharge zone.	Ensures that permitted development can receive on-site water quality treatment using structural controls.	None.	41
95.	Transfer of Develop- ment Intensity §25-8-424(A)	See descripti	See descriptions and discussion of equivalent changes for §25-8-393(A), (A)(1), (A)(5) and (A)(6). (Items 86, 87,89, and 90, respectively.)			42
96.	Transfers: Water Quality Transition Zone §25-8- 424(A)(2)	Only option is to dedicate land to City.	Add option to allow land to be transferred to "another entity" (e.g., County, a land trust).	Clarity. Extend more options for transfers, which confer environmental & community benefits.	None.	42
97.	Transfers: Golf Courses §25-8-424(A)(3) [Deleted]	Current code allows increased impervious cover in the Uplands if golf courses in the water quality transition zone use native plants and minimize fertilizer use; but does not provide public benefit.	Delete this section.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.	42

Potential Option		Status/Concern	Proposed Improvement	Anticipated Impacts		Page
				Advantages	Disadvantages	No.
98.	Disposal §25-8-424(A)(4)	Current code allows increased impervious cover in the Uplands if wastewater irrigation areas are placed within the water quality transition zone; but does not provide public benefit.	Delete this section.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.	42
	Transfer of Develop- ment Intensity §25-8-424(B)		criptions and discussion of equivalent cha	anges for §25-8-393(B) in item 92 at	pove.	42-43
		PLY RURAL WATERSHED REQUIREM	IENTS			43 43
100.	Critical Water Quality Zone §25-8-452 [Deleted]	Critical Water Quality Zone items moved to §25-8-261 Critical Water Quality Zone Development. See item 48 above. No change in regulations.				
101.		Current code prohibits the placement of water quality controls in WQTZs in Water Supply Rural watersheds, despite the allowance of development in these areas.	water quality controls in WQTZ (language aligned with Barton Springs Zone) in Water Supply Rural watersheds.	Ensures that permitted development in WQTZs can receive on-site water quality treatment using structural controls.	None.	44
102.	Water Quality Transition Zone (WQTZ) §25-8-452(B)(4)	Code unnecessarily permits parks and open space in the WQTZ; is already permitted in §25-8-451(B)(1).	Delete parks & open space reference (is covered by Article 7, Division 1 reference and therefore redundant).	Clarity.	None.	44
103.	Water Quality Transition Zone (WQTZ) §25-8-452(C)	Current code requires that a Water Supply Rural lot that lies within a CWQZ must also include at least 2 acres in a WQTZ; leads to unnecessary variance requests.	Expand to two acre min. in WQTZ or upland area.	Eliminate unproductive variance requests.	None.	44
	Cluster Housing §25-8-453(C)(2)	Much of the original text describing the use and requirements of cluster housing was inadvertently deleted from the code, leaving use of this provision unclear.	the 40% required natural buffer shall receive runoff from developed areas.	Clarify requirements to use cluster housing provisions for WS Rural watershed development; current code & criteria do not provide guidance; ensure treatment of runoff.	None.	44
	40 Percent Buffer §25-8-453(C)(2)	Not clear that the 40 percent buffer must be located in the uplands and that the overland drainage received must come from the developed areas of the site.	Clarify that the 40 percent buffer is located within the uplands and must receive overland drainage from developed areas (e.g., impervious cover) of the site. Moved prohibition on wastewater disposal areas in the buffer from §25-8-361 (see 75 above).	Clarity.	None.	45
106.	Transfer of Develop- ment Intensity §25-8-454(A)	See descripti	ions and discussion of equivalent change (Items 86, 87, 89, and 90		nd (A)(6).	45

Watershed Protection Ordinance: Summary and Discussion of Proposed Code Changes

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Potential Option		Description of Current Proposed Improvement	Anticipated Impacts		Page	
Pole	ппат Орноп	Status/Concern Proposed Improvement	Advantages	Disadvantages	No.	
107.	Transfer of Develop- ment Intensity §25-8-454(A)	See descriptions and discussion of equivalent changes for §25-8-424, (A)(2), (A)(3) and (A)(4). (Items 96, 97, and 98 respectively.)				
	Transfer of Develop- ment Intensity §25-8-454(B)	See descriptions and discussion of equivalent changes for §25-8-393(B) in item 92 above.				
		RINGS ZONE WATERSHED REQUIREMENTS				
109.	Critical Water Quality Zone §25-8-482 [Deleted]	Critical Water Quality Zone items moved to §25-8-261 Critical Water Quality Zone Development. See item 48 above. No change in regulations.				
110.	Water Quality Transition Zone (WQTZ) §25-8-482	Language for water quality transition zone requirements differ slightly for Water Supply Suburban, Water Supply Rural, and Barton Springs Zone.	Align language as much as possible across the three sections.	Consistency.	None.	47
111.		Code unnecessarily distinguishes between vegetative filter strips and water quality controls.	Delete vegetative filter strip reference (is covered by "water quality control" and therefore redundant). Align text with other water supply sections for WQTZ.	Clarity.	None.	47
ARTI	CLE 13. SAVE OUR S	SPRINGS INITIATIVE				47
113.		Original SOS Ordinance was prohibited from repeal or amendment within two years of its effective date on August 10, 1992. This two year period has passed and is no longer relevant to code compliance.		Clarity. Does not impact implementation of ordinance.	None.	47
114.	SOS List of Pollutants §25-8-514	•	Delete fecal coliform and fecal streptococci and replace with E. coli.	Reflect current science.	None.	48